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S&H Form: (2/01)
DOCKET NO. 1826.1129

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Jens C. RASMUSSEN et al.

Serial No: 10/595,031

Group Art Unit: 2874

Confirmation No. 1554

Filed: December 30, 2005

Examiner:

For: POLARIZATION MODE DISPERSION COMPENSATOR FOR RESET-FREE, ENDLESS
POLARIZATION CONTROL WITHOUT REQUIRING REWIND OPERATIONS AND
METHOD THEREOF

REQUEST FOR CORRECTED FILING RECEIPT

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

It is requested that the Assignee and the title on the Official Filing Receipt be corrected. The correct Assignee is **FUJITSU LIMITED, Kawasaki, JAPAN** and the correct title is **POLARIZATION MODE DISPERSION COMPENSATOR RESET-FREE, ENDLESS POLARIZATION CONTROL WITHOUT REQUIRING REWIND OPERATIONS AND METHOD THEREOF**, as is evidenced by the copy of the Assignment and copy of the Declaration, attached to the application as filed. For the convenience of the Patent and Trademark Office, attached is a photocopy of the original receipt on which the errors have been noted in red.

It is requested that a corrected Official Filing Receipt be issued in this application.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 9/19/06

By: [Signature]
J. Randall Beckers
Registration No. 30,358

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UNITED STATES PATENT AND TRADEMARK OFFICE

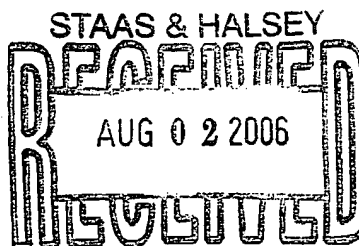


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| APPL NO. | FILING OR 371 (c) DATE | ART UNIT | FIL FEE REC'D | ATTY. DOCKET NO | DRAWINGS | TOT CLMS | IND CLMS |
|------------|---------------------------|----------|---------------|-----------------|----------|----------|----------|
| 10/595,031 | 12/30/2005 | 2874 | 900 | 1826.1129 | 17 | 11 | 3 |

CONFIRMATION NO. 1554

21171
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005



FILING RECEIPT



OC000000019721995

Date Mailed: 07/24/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Jens C. Rasmussen, Kawasaki, JAPAN;
Akihiko Isomura, Kawasaki, JAPAN;

-- Assignment for Published Patent Application
Fujitsu Limited, Kawasaki, JAPAN --

Power of Attorney: The patent practitioners associated with Customer Number 21171.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/JP03/08767 07/10/2003

Foreign Applications

If Required, Foreign Filing License Granted: 07/21/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/595,031**

Projected Publication Date: 11/02/2006

Non-Publication Request: No

Early Publication Request: No

Title

-- Polarization mode dispersion compensator for reset-free, endless polarization control without requiring rewind operations and method thereof --

Preliminary Class

385

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

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NOT GRANTED

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Declaration and Power of Attorney for Patent Application

特許出願宣言書及び委任状

Japanese Language Declaration

日本語宣言書

私は、以下に記名された発明者として、ここに下記の通り宣言する：

As a below named inventor, I hereby declare that:

私の住所、郵便の宛先そして国籍は、私の氏名の後に記載された通りである。

My residence, post office address and citizenship are as stated next to my name.

下記の名称の発明について、特許請求範囲に記載され、且つ特許が求められている発明主題に関して、私は、最初、最先且つ唯一の発明者である（唯一の氏名が記載されている場合）か、或いは最初、最先且つ共同発明者である（複数の氏名が記載されている場合）と信じている。

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

POLARIZATION MODE DISPERSION COMPENSATOR FOR
RESET-FREE, ENDLESS POLARIZATION CONTROL
WITHOUT REQUIRING REWIND OPERATIONS AND
METHOD THEREOF

上記発明の明細書はここに添付されているが、下記の欄がチェックされている場合は、この限りでない：

the specification of which is attached hereto unless the following box is checked:

☐ _____ の日に出願され、
この出願の米国出願番号またはPCT国際出願番号は、
_____ であり、且つ
_____ の日に補正された出願（該当する場合）

☒ was filed on 10th/July/2003
as United States Application Number or
PCT International Application Number
PCT/JP2003/008767 and was amended on
_____ (if applicable).

私は、上記の補正書によって補正された、特許請求範囲を含む上記明細書を検討し、且つ内容を理解していることをここに表明する。

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

私は、連邦規則法典第37編規則1.56に定義されている、特許性について重要な情報を開示する義務があることを認める。

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

Japanese Language Declaration (日本語宣言書)

私は、ここに、以下に記載した外国での特許出願または発明者証の出願、或いは米国以外の少なくとも一国を指定している米国法典第35編第365条(a)によるPCT国際出願について、同第119条(a)-(d)項又は第365条(b)項に基づいて優先権を主張するとともに、優先権を主張する本出願の出願日より前の出願日を有する外国での特許出願または発明者証の出願、或いはPCT国際出願については、いかなる出願も、下記の枠内をチェックすることにより示した。

I hereby claim foreign priority under Title 35, United States Code, Section 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT International application which designated at least one country other than the United States listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application for which priority is claimed.

Prior Foreign Application(s)
外国での先行出願

Priority Not Claimed
優先権主張なし

| | |
|---------------------------|----------------------------|
| _____ (Number) (番号) | _____ (Country) (国名) |
| _____ (Number) (番号) | _____ (Country) (国名) |

| | |
|--|--------------------------|
| _____ (Day/Month/Year Filed) (出願日/月/年) | <input type="checkbox"/> |
| _____ (Day/Month/Year Filed) (出願日/月/年) | <input type="checkbox"/> |

私は、ここに、下記のいかなる米国仮特許出願についても、その米国法典第35編119条(e)項の利益を主張する。

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below.

| | |
|--------------------------------------|---------------------------------|
| _____ (Application No.) (出願番号) | _____ (Filing Date) (出願日) |
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|--------------------------------------|---------------------------------|
| _____ (Application No.) (出願番号) | _____ (Filing Date) (出願日) |
|--------------------------------------|---------------------------------|

私は、ここに、下記のいかなる米国出願についても、その米国法典第35編第120条に基づく利益を主張し、又米国を指定するいかなるPCT国際出願についても、その同第365条(c)に基づく利益を主張する。また、本出願の各特許請求の範囲の主題が、米国法典第35編第112条第1段に規定された態様で、先行する米国出願又はPCT国際出願に開示されていない場合においては、その先行出願の出願日と本国内出願日またはPCT国際出願日との間の期間中に入手された情報で、連邦規則法典第37編規則1.56に定義された特許性に関わる重要な情報について開示義務があることを承認する。

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of application.

| | |
|--------------------------------------|---------------------------------|
| _____ (Application No.) (出願番号) | _____ (Filing Date) (出願日) |
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| _____ (Status: Patented, Pending, Abandoned) (現況 : 特許許可、係属中、放棄) |
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| _____ (Application No.) (出願番号) | _____ (Filing Date) (出願日) |
|--------------------------------------|---------------------------------|

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|---|
| _____ (Status: Patented, Pending, Abandoned) (現況 : 特許許可、係属中、放棄) |
|---|

私は、ここに表明された私自身の知識に係わる陳述が真実であり、且つ情報と信ずることに基づく陳述が、真実であると信じられることを宣言し、さらに、故意に虚偽の陳述などを行った場合は、米国法典第18編第1001条に基づき、罰金または拘禁、若しくはその両方により処罰され、またそのような故意による虚偽の陳述は、本出願またはそれに対して発行されるいかなる特許も、その有効性に問題が生ずることを理解した上で陳述が行われたことを、ここに宣言する。

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Japanese Language Declaration
(日本語宣言書)

委任状： 私は本出願を審査する手続を行い、且つ米国特許商標庁との全ての業務を遂行するために、記名された発明者として、下記の弁護士及び／または弁理士を任命する。(氏名及び登録番号を記載すること)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number).

The attorneys and agents of Staas & Halsey LLP under USPTO Customer No. 21,171.

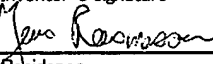
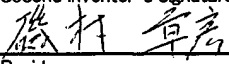
書類送付先

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1201 New York Ave., N.W.
Suite 700
Washington, D.C. 20005

直通電話連絡先: (氏名及び電話番号)

Direct Telephone Calls to: (name and telephone number)

Telephone: 202-434-1500
Facsimile: 202-434-1501

| | | | |
|-------------------|---|--|--------------------------|
| 唯一または第一発明者氏名 | | Full name of sole or first inventor Jens C. RASMUSSEN | |
| 発明者の署名 | 日付 | Inventor's signature  | Date October 17, 2005 |
| 住所 | Residence Kawasaki, Japan | | |
| 国籍 | Citizenship German | | |
| 郵便の宛先 | Post Office Address c/o FUJITSU LIMITED, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588 Japan | | |
| 第二共同発明者がいる場合、その氏名 | | Full name of second joint inventor, if any Akihiko ISOMURA | |
| 第二共同発明者の署名 | 日付 | Second inventor's signature  | Date October 17, 2005 |
| 住所 | Residence Kawasaki, Japan | | |
| 国籍 | Citizenship Japanese | | |
| 郵便の宛先 | Post Office Address c/o FUJITSU LIMITED, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588 Japan | | |

(第三以下の共同発明者についても同様に記載し、署名をすること)

(Supply similar information and signature for third and subsequent joint inventors.)

ATENT COOPERATION TREATY

PCT



INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| | | |
|---|---|---|
| Applicant's or agent's file reference 0253398/3513 | FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below. | |
| International application No. PCT/JP 03/08767 | International filing date (day/month/year) 10/07/2003 | (Earliest) Priority Date (day/month/year) |
| Applicant FUJITSU LIMITED | | |

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

POLARIZATION MODE DISPERSION COMPENSATOR AND METHOD THEREOF

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

8

☐ None of the figures.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
20 January 2005 (20.01.2005)

PCT

(10) International Publication Number
WO 2005/006603 A1

(51) International Patent Classification⁷: **H04B 10/18**

211-8588 (JP). ISOMURA, Akihiko [JP/JP]; c/o Fujitsu Limited, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588 (JP).

(21) International Application Number:
PCT/JP2003/008767

(74) Agent: OSUGA, Yoshiyuki; 3rd Fl., Nibancho Bldg., 8-20, Nibancho, Chiyoda-ku, Tokyo 102-0084 (JP).

(22) International Filing Date: 10 July 2003 (10.07.2003)

(25) Filing Language: English

(81) Designated States (*national*): CN, JP, US.

(26) Publication Language: English

(84) Designated States (*regional*): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

(71) Applicant (*for all designated States except US*): FUJITSU LIMITED [JP/JP]; 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588 (JP).

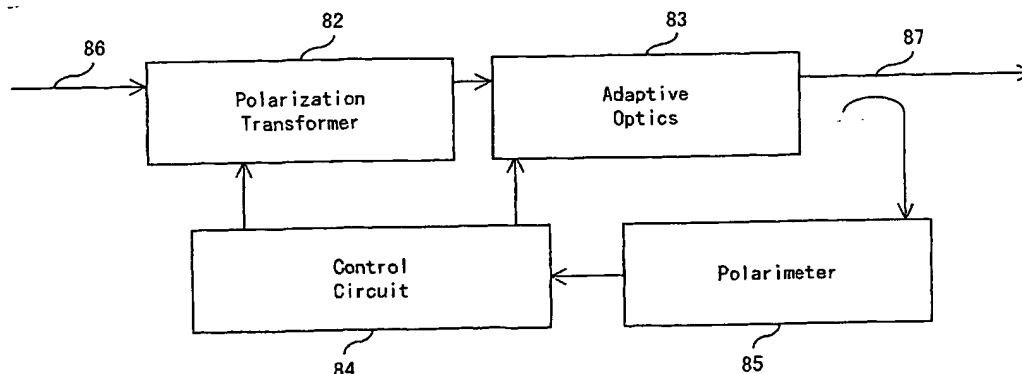
Published:
— with international search report

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): RASMUSSEN, Jens, C. [DE/JP]; c/o Fujitsu Limited, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: POLARIZATION MODE DISPERSION COMPENSATOR AND METHOD THEREOF



(57) Abstract: A polarization transformer in a polarization mode dispersion compensator is adjusted over its changing device characteristics with environmental changes and time by using a feedback signal indicating a state of polarization and a distortion of an

WO 2005/006603 A1

U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by
(Insert Name(s) & Address(es) of ASSIGNEE(S))
FUJITSU LIMITED

1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588 Japan

(hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled
(Title of Invention)

POLARIZATION MODE DISPERSION COMPENSATOR FOR RESET-FREE, ENDLESS POLARIZATION CONTROL

WITHOUT REQUIRING REWIND OPERATION AND METHOD THEREOF

relating to International Patent Application PCT/JP _____ and/or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was:

(a) executed on _____;

(Insert date of execution of application, if not concurrent)

(b) filed on _____;

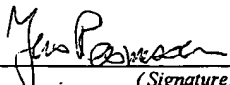
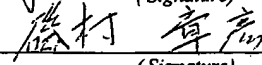
Serial No. _____/_____;

Assignee's attorney is hereby authorized to insert in (b) the specified data, when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

| | | | |
|----|--|----------------------------------|----------------------------|
| 1) |  (Signature) | Jens C. RASMUSSEN (Type Name) | October 17, 2005 (Date) |
| 2) |  (Signature) | Akihiko ISOMURA (Type Name) | October 17, 2005 (Date) |
| 3) | _____ (Signature) | _____ (Type Name) | _____ (Date) |
| 4) | _____ (Signature) | _____ (Type Name) | _____ (Date) |
| 5) | _____ (Signature) | _____ (Type Name) | _____ (Date) |